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COUNCIL
ON
COMPETITIVENESS

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COMPETITIVENESS INDEX 1990

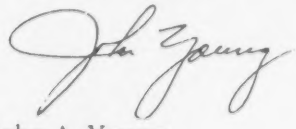
PREFACE

The Council on Competitiveness is pleased to publish its third annual Competitiveness Index. The Index is a readily accessible measure of our nation's economic performance, translating "competitiveness" into terms the public can understand. The Council believes that efforts to improve the competitive abilities of U.S. business and workers will be most effective if the American people understand our nation's position in the world economy and how it affects American daily life.

We realize there is no perfect measure of an issue as complex as competitiveness. We are equally convinced, however, that if the United States is to improve its ability to compete in world markets, competitiveness must be assessed in a way that is tangible and meaningful to the American public. The Index offers that context by gauging U.S. economic performance in a global economy, presenting both the latest figures available, and showing trends. The ultimate measure of "competitiveness" is our standard of living. To improve our standard of living over the long term, the Council believes we must begin to focus on ways to improve U.S. performance at home and in the international economy.

Because of the critical role of investment to economic performance, this particular indicator of competitiveness is highlighted in this year's evaluation.

We hope that you find the 1990 Index helpful in understanding U.S. performance in the changing world economy.



John A. Young
Chairman

JUNE 1990

INTRODUCTION

The Council on Competitiveness presents its third annual Competitiveness Index. U.S. economic performance in the world economy is compared with that of our major economic competitors — Canada, France, Germany, Italy, Japan, and the United Kingdom. The Index assesses competitiveness for these Summit 7 countries by looking at four broad economic indicators: standard of living, trade, manufacturing productivity, and investment.

Our purpose is to portray a picture of the U.S. competitive position relative to its own past performance and to other international competitors. First, an overview of trends is presented for each of our competitiveness indicators. Then the statistical findings are presented in the "Index" section. We believe this perspective will serve as a useful backdrop on the eve of the Group of 7 Economic Summit in Houston and, more generally, will offer the American people a useful snapshot of the state of the nation's economic health.

The Pyramid of Competitiveness

No single measure adequately reflects the complexity of a nation's competitive performance. The Council therefore uses a *series of four interrelated indicators to assess America's competitiveness.* Our pyramid is by now familiar to past readers of the Index.

Investment is the foundation of the pyramid. It is the most basic and the most future-oriented of the competitiveness indicators. How much we invest is an important determinant of the other three measures of competitiveness. Investment, as calculated in the Index, is a weighted average of national expenditures on capital (plant and equipment), education, and non-defense R&D.

Just above Investment is **Manufacturing Productivity**, which is measured as Gross Domestic Product per employee in the manufacturing sector. Productivity is most directly influenced by such investment factors as the state of equipment and the quality and performance of

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human resources. Manufacturing continues to account for about 20-22 percent of U.S. GNP and the bulk of U.S. trade.

Directly above Productivity is **Trade**. Trade in the Index is measured as U.S. share of world exports — an indication of America's success in competing in world markets. Because productivity has a major impact on the cost of final products, there is a direct connection between productivity and trade performance. With the increasing internationalization of markets, trade plays an ever more important role in determining U.S. national income.

At the top of the pyramid is **Standard of Living**, the ultimate goal of a productive economy. Standard of Living is measured as Gross Domestic Product per capita and, as such, reflects how much income is generated for every American.

Focus on Investment

This year's Index highlights U.S. investment. Investment is the base from which our current level of productivity, trade, and standard of living is derived, and it gives us the best clue to the nation's future competitive position. When we think of investment, we think in terms of long time horizons; current investment data tell us little about the present state of the economy. In the Index, we focus on investment in capital (plant and equipment), human resources (education), and innovative technologies and processes (non-defense R&D).

Investment is the most difficult competitiveness indicator to gauge and quantify accurately. National accounts do not lend themselves to easy comparison in the area of investment. Although investment figures for plant and equipment and non-defense R&D seem relatively straightforward, the absence of a standardized international methodology for obtaining these figures means these numbers should be considered carefully. International comparisons in education are especially difficult, since educational systems and funding vary greatly from country to country. Infrastructure and worker training are also important components of investment, but these numbers are not included in our analysis because they are unavailable on an international comparative basis.

The Council believes that special attention must be given to America's investment performance. Investment is perhaps the best indicator of how the United States will perform compared with its chief economic competitors in the coming century.

Understanding the Index

The Council uses 1972 as its base year in measuring the changing relative performance of the United States. The Index for 1972 is set at 100. A rise in the Index to more than 100 signifies the United States has outperformed other nations since then; a drop in the Index below 100 indicates other countries have outperformed the United States. Constant 1980 dollars are used in our calculation of national accounts, unless noted otherwise. The term Other Summit 7 is used to define all the Summit 7 countries except the United States.

Any changes in methodology over the past year, caused by revisions in OECD data and/or improvements in data collection, are discussed in the background data and methodology supplement.

The data used to construct the Competitiveness Index are available by contacting the Council on Competitiveness. The Council has been provided with technical assistance by The WEFA Group (Wharton Econometrics Forecasting Associates) in the initial construction of the Index and in the compilation of this year's data.

LONG TERM TRENDS

Investment

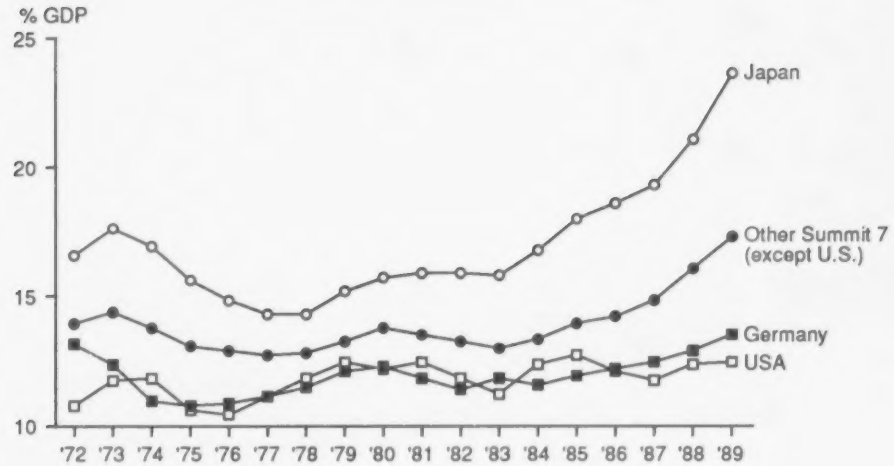
■ The United States continues to outinvest its Summit 7 competition in absolute dollar amounts only because U.S. GDP is so much higher than any other individual country's. In relative terms — measured as a percent of GDP spent on various forms of investment — some of our chief competitors are racing ahead of us. If current trends continue, these countries will meet and surpass the United States in absolute levels of investment spending. In some areas this is already happening.

■ The Other Summit 7 countries, on average, allocate a higher percentage of GDP to fixed non-residential capital and non-defense R&D than we do. And even though we continue to allocate more of our GDP to education than other countries, the level of academic performance by American students does not measure up to international standards.

■ Because net national saving is the domestic source of investment, it is significant that the U.S. saving rate declined from 16.6% of GDP in 1972 to 14.9% in 1989. Although the Other Summit 7 average has also declined since 1972, some of our chief Summit 7 competitors still save up to 10 percentage points more than we do. In 1989, Germany saved 21.1% of GDP and Japan, 25.8%.

Investment

Private Industry Expenditure on Plant and Equipment



Source: Council on Competitiveness and OECD National Accounts

Plant and Equipment

In 1989, for the first time since World War II, another country outinvested the United States in plant and equipment.

■ **Dollar for Dollar, Japan Invested More in 1989:** Japan has spent an average of 17% of GDP on plant and equipment annually since 1972 — compared with 14% for the Other Summit 7 countries and 12% for the United States. In 1989, Japan spent a record 23.6% of GDP on plant and equipment. This marks the first time that any country has out-invested the United States in plant and equipment in absolute terms since World War II. Japan did so by $36 billion in 1989 - $549 billion to $513 billion - despite the fact that America's GDP was more than twice that of Japan. The end result of Japan's concentrated spending is an industrial base that is one of the most modern, efficient, and competitive in the world.

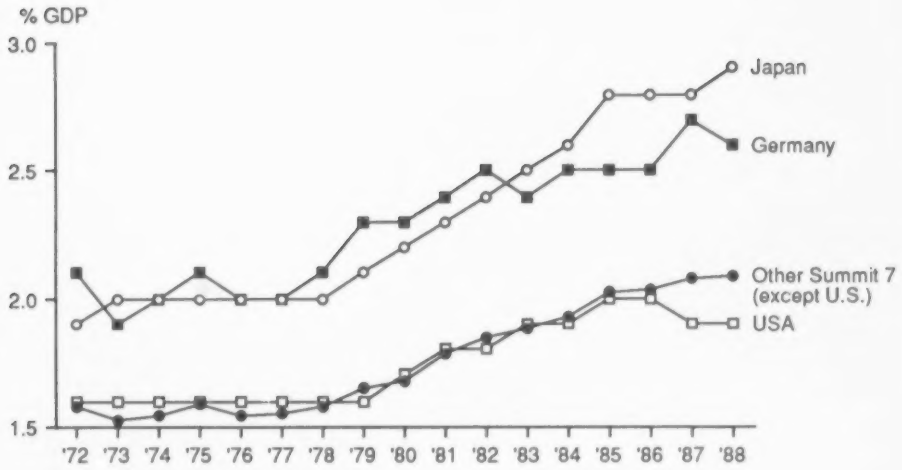
■ **U.S. Investment Lags for 20 Years:** Over the past 20 years, U.S. private investment in plant and equipment, as a percent of GDP, has consistently fallen below the Other Summit 7 average. 1989 was no exception: The United States spent 12.5% of GDP on non-residential fixed investment, slightly more than the previous year, but below the Other Summit 7 average of 17.3%.

■ **Japan Keeps Average Up:** The Other Summit 7 average was high primarily because of Japan's tremendous capital infusions. Germany, for example, spent 13.5% of GDP, about the same as the United States.

■ **U.S. Infrastructure Spending Drops:** An efficient network for the transportation of goods and labor is particularly important to a large continental economy such as ours. There is no internationally comparable data, but evidence in the United States points to a steady decline in the share of public spending on non-residential fixed investment such as roads, railways, and bridges. Between 1965 and 1985, total U.S. public spending on infrastructure dropped from 2.2% of GNP to 1.0%.

Investment

Non-Defense R&D Expenditure



Source: Council on Competitiveness and National Science Foundation

Non-Defense R&D

In 1989, Japan and Germany both spent about 50% more on non-defense R&D, as a percent of GDP, than the United States.

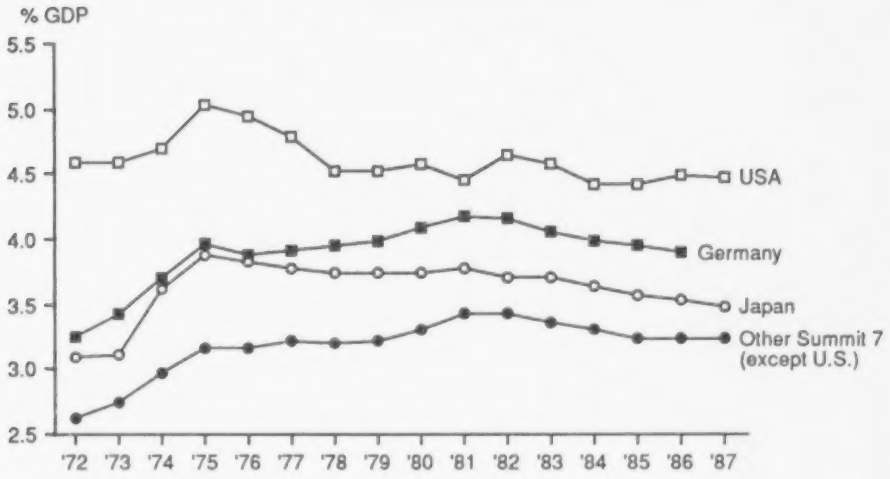
■ **Total vs. Non-defense R&D:** The United States leads the Summit 7 countries in terms of absolute dollars spent on total R&D investment. Total R&D, however, includes spending for defense-related purposes. Non-defense R&D is a better indicator of future commercial competitiveness, especially since the "spillover" from military R&D to commercial applications has declined in recent years.

■ **Competitors Boost Non-defense R&D:** The United States has slightly increased the percent of GDP it spends on non-defense R&D since 1972. During the same period, however, some of our principle economic competitors increased their expenditures by about 50%.

■ **Germany and Japan Set the Pace:** Although the U.S. averages of 1.6% of GDP in 1972 and 1.9% in 1988 were in line with the Other Summit 7 averages of 1.6% and 2.1% for the same years, American investment on non-defense R&D compared poorly with Germany and Japan. In 1972, Germany and Japan each spent about 2% of GDP on non-defense R&D. By 1988, Germany had increased to 2.6% of GDP, and Japan to 2.9%. Total U.S. investment in R&D (defense and non-defense) came to 2.9% of GDP in 1988.

Investment

Government Expenditure on Education



Source: Council on Competitiveness and OECD National Accounts

Education

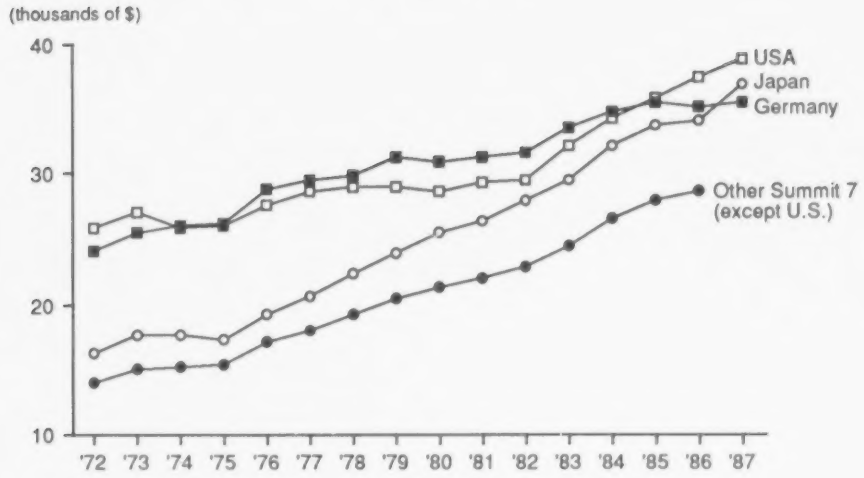
In the one area of investment where we do not have an investment gap — education — we have a performance gap.

■ **U.S. Tops at the Top:** The United States has one of the world's best university systems — confirmed by record numbers of foreign students and faculty — and one of the highest levels of GDP spending on education. In the most recent data available (1987), the United States spent 4.5% of GDP on education, Japan spent 3.5%, and Germany 3.2%.

■ **U.S. Spending More - Achieving Less:** Ironically, in the one area of investment where we do not have an investment shortfall — education — we have a performance gap, rooted in the kindergarten through high school level. American students perform poorly on internationally standardized math and science tests. High drop-out rates, inadequately prepared graduates, and an ever increasing shortage of Americans trained in science will have severe ramifications for the future American industry.

Productivity

GDP per Manufacturing Employee
(Constant 1980 Dollars)



Source: Council on Competitiveness and OECD National Accounts

The United States is running neck-and-neck with Germany and Japan in manufacturing productivity, and Other Summit 7 countries are catching up.

■ **United States Leads:** Over the past two decades, U.S. output per manufacturing employee grew more slowly than the Other Summit 7 country average, but in absolute terms U.S. manufacturing productivity remained the highest of the Summit 7.

■ **The Gap Closes:** An American manufacturing employee produced $25,800 in 1972, compared with the $14,000 Other Summit 7 country average. While the Germans had come close to the American average with $24,300, the Japanese employee produced only $16,200. By 1987, the average American employee produced $38,800 worth of goods a year, with the German close behind at $35,500. In Japan the average manufacturing worker has more than doubled his productivity since 1972, reaching $36,900 in 1987.

■ **1974-1982 - the One Percent Decade:** In the period 1974-1982, productivity growth slowed throughout the world, but the drop in the growth of U.S. manufacturing productivity was so steep, that Germany was able to pass the U.S. productivity in absolute terms from 1975-1985. During the same period, Japan and others became even more successful in closing the already narrowing gap. The United States averaged 1% annual growth during this period; Germany did slightly better at 2.4%; Japan, however, achieved 5.3% annual productivity growth, driving up the Other Summit 7 country average to 4.9%.

■ **1983-1987 - U.S. Back in the Pack:** Since 1983, U.S. manufacturing productivity has picked up considerably. From 1983-1987, productivity increased at a 5.7% rate, just below the Other Summit 7 country's pace of 5.9% and Japan's 5.8%. In 1987, the U.S. manufacturing productivity growth was 4.1%, well behind Japan's 8.4% rate, but well ahead of Germany's 0.9%.

■ **Productivity - More Profits, More Pay:** Productivity and prosperity are closely linked. When a country's productivity increases, it produces more goods and services at a lower cost. Businesses become more profitable and real wages improve. Productivity growth is therefore the single best indicator of a nation's changing competitiveness. Moreover, because the bulk of international trade is still in manufactured goods, manufacturing productivity growth is a key indicator of a nation's ability to improve its competitive position in world markets.

Trade

Source: Council on Competitiveness and International Financial Statistics

Despite record exports, the United States continues to rack up $100 billion plus trade deficits because of high import levels.

■ **U.S. Sets Export Record, Regains the Lead:** In 1989, U.S. export sales totalled $364 billion. The United States regained its position as the world's leading exporter, surpassing Germany, which had held the top spot since 1986. The world's other two leading exporters in 1989 were Germany ($341.4 billion) and Japan ($273.9 billion).

■ **Exports Follow Dollar's Rise and Fall:** The unusually high international value of the dollar in the mid-1980s drove up the price of U.S. exports in international markets and led to a loss in the U.S. share of world exports. By 1989, the United States had regained most of its share and accounted for 11% of world exports — a marked improvement over the 9% average in the 1983-1987 period and consistent with its performance in the early 1970s. The decline in the international value of the dollar after 1985 was in large part responsible for the resurgence in U.S. exports.

■ **U.S. Export Strengths - High Fiber and High Tech:** U.S. export strengths are in agricultural products, crude materials (excluding fuels), and some high-tech sectors such as aerospace, chemicals, pharmaceuticals, and biomedical/scientific equipment.

■ **Manufacturing Imports - High and Still Rising:** Unfortunately, the United States not only led the world in exports, but also in imports. Last year the U.S. imported $492.9 billion. U.S. imports in manufactured goods constitute the bulk of U.S. trade and the U.S. trade deficit. U.S. manufactured imports as a percent of U.S. manufacturing output increased from 5% in 1972 to 12% in 1987. Continued U.S. reliance on imports — despite a declining dollar which makes imports relatively more expensive — points to some basic problems in U.S. manufacturing competitiveness that go beyond relative prices.

■ **Trade Deficit - Still a $100 Billion Problem:** High U.S. manufactured imports resulted in record-breaking trade deficits. U.S. merchandise trade deficits have regularly topped $100 billion since 1984. 1987 stands out as the worst year with a U.S. record $152.1 billion deficit. The dollar's decline after 1985 contributed to a downward drift in deficits in the final years of the decade, resulting in a $108.6 billion deficit in 1989. The recent upturn in the dollar, however, may trigger a larger trade deficit next year. Germany and Japan had trade surpluses of $71.4 billion and $63.9 billion, respectively, in 1989.

■ **Trade Deficits - from Oil to Manufacturing:** Most of our trade imbalance in the early 1980s was caused by our dependence on expensive foreign petroleum. By the middle of the decade, however, most of our trade imbalance was from imports of consumer electronics and automobiles.

Standard of Living

Source: Council on Competitiveness and OECD National Accounts

In 1989, the U.S. standard of living continued to exceed that of all the Other Summit 7 countries except Germany, but others are catching up.

■ **Only Germany Ahead:** In absolute terms, the U.S. standard of living still exceeds all the Other Summit 7 countries but Germany. In 1989, U.S. GDP per capita in constant 1980 dollars was $14,180, compared with the average of $13,070 for the Other Summit 7 countries. Germany's standard of living has been higher than the U.S. average for two decades, and in 1989 was $15,250. Japan still has a relatively low standard of living, with only $11,820 per capita in 1989.

■ **Slow U.S. Growth Lets Others Reduce the Gap:** The U.S. standard of living has increased since 1972, but growth was at a slower rate than that of the Other Summit 7. In 1972, the U.S. standard of living was 22% higher than the Other Summit 7 countries; the margin had shrunk to 8% by 1989. The gap between the U.S. and Japanese standard of living has decreased markedly, from 49% in 1972 to 14% in 1989. The German standard of living was 3% higher than the United States' in 1972, and this edge had increased to 10% in 1989.

■ **U.S. Unemployment Rate Lower than Other Summit 7 Average:** Although output per employee has grown more slowly in America than in the Other Summit 7 countries, U.S. unemployment rates in 1989 were well below the 6.6% average of the Other Summit 7. Our 5.3% unemployment rate in 1989 represents a return to the level of the early 1970s, after having topped 9.7% in 1982. The German unemployment rate, by contrast, jumped from 1.1% in 1972 to 9.3% in 1985. In 1989, it was still 8%. The Japanese unemployment rate of 1.4% in 1972 had risen only moderately to 2.3% by 1989. The relatively low U.S. unemployment rates indicate a successful absorption of new entrants into the workforce.

■ **American Workers' Wages Stagnate:** In 1987, the last year of available data for all countries surveyed, the average American manufacturing worker earned salary and benefits of $22,598 (in constant 1980 dollars), barely $1,000 more than he received in 1972. On average, the German worker earned about $7,500 more in 1987 than in 1972. The average Japanese manufacturing worker was paid $15,158 in salary and benefits in 1987, about $5,000 more than in 1972.

■ **Will We Keep Up with the Schmidts and Nakamuras?** What does the standard of living measure mean to the average American? A relative decline in standard of living will mean that the average American may be on the way to getting relatively less income than his peers in the Other Summit 7 countries. Less income may mean fewer economic choices for an American relative to his peers abroad.

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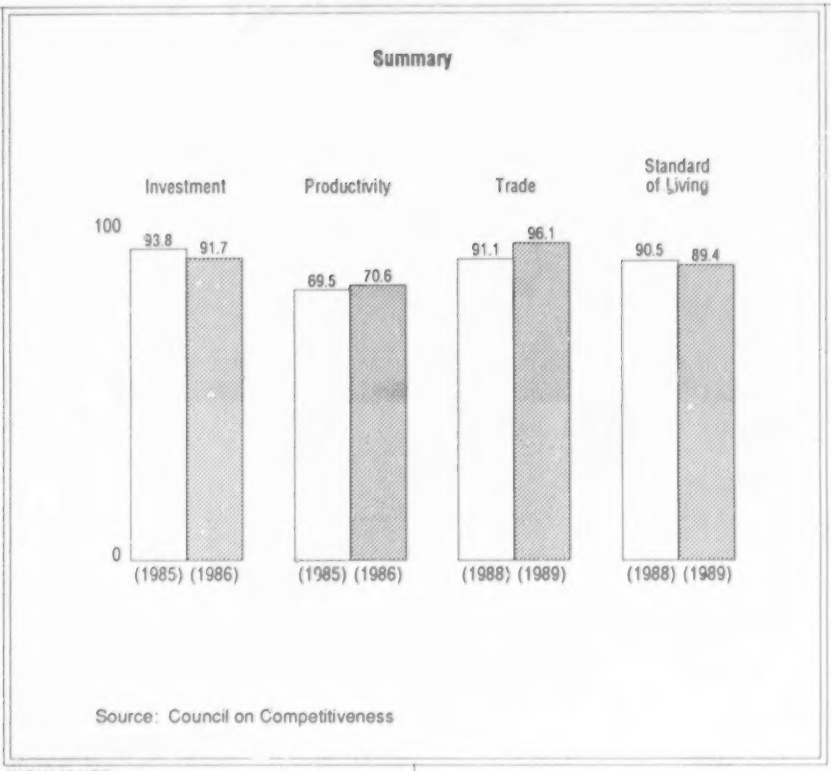


HIGHLIGHTS

Investment

■ The U.S. Investment Index dropped from 93.8 in 1985 to 91.7 in 1986 (the most recent complete data available), showing that U.S. investments as a percent of GDP declined relative to the average of the Other Summit 7 countries. The United States invests less in capital and non-defense R&D as a share of GDP than the Other Summit 7 average. We invest more in education as a percent of GDP than the Other Summit 7 average, but higher levels of investment have not been matched by higher levels of student performance. As some of our most assertive economic competitors continue to increase their GDP allotments to investment, we are, in some cases, investing even less than in the past.

Productivity

■ In 1986, the most recent year for internationally comparable data, the Productivity Index increased to 70.6. Over the past two decades, however, U.S. manufacturing productivity has declined relative to the Other Summit 7 country average.

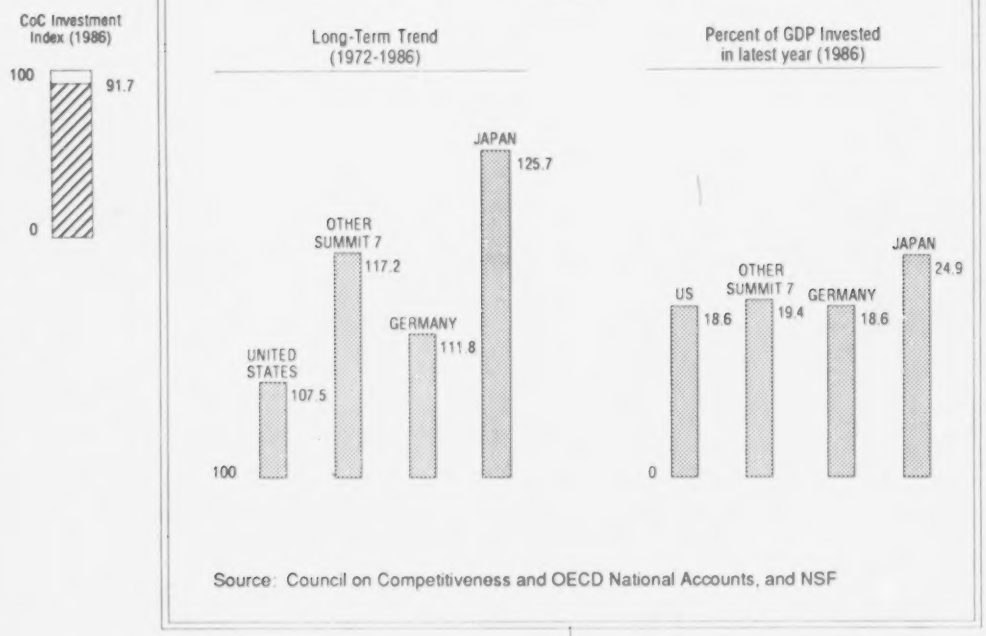
Trade

■ In 1989, the U.S. Trade Index rose for the third consecutive year, reaching 96.1. Although the United States did not fully recover the export share lost through dollar appreciation in the mid-1980s, the 11% world export share in 1989 was close to the 12% share achieved in 1972.

■ Since 1981, U.S. manufactured exports have not grown as rapidly as world manufactured exports. However, in 1989, for the first time since 1981, U.S. manufactured exports grew more rapidly than the average of the Other Summit 7 countries.

Standard of Living

■ The U.S. Standard of Living Index continued to decline, dropping from 90.5 in 1988 to 89.4 in 1989. Although the United States still has a higher standard of living than the Other Summit 7 average, its standard of living has, on average, not grown as rapidly as that of the rest. Since 1972, the U.S. standard of living has grown by 34%. The Other Summit 7 averaged a 50% increase over the same period.



■ Total U.S. investment in capital and human resources as a percent of GDP has declined relative to the Other Summit 7 countries since 1972. In 1986, the last year for which there was data available for a full Summit 7 comparison, the U.S. Index stood at 91.7.

Non-Residential Fixed Investment

■ In 1989, U.S. performance in non-residential fixed investment fell once again, relative to the Other Summit 7 countries. Until 1988, U.S. capital investment had increased relatively more rapidly than the average of the Other Summit 7 nations. Since World War II, the United States has increased its plant and equipment investment by an average of one percentage point of GDP per decade. Germany invested about the same in plant and equipment in 1989 (13.5% of GDP) as it did in 1972 (13.1%). Japan, however, allocated 7 more percentage points of GDP to capital resources in 1989 than it did in 1972, leading to a record level of 23.6% in 1989. The United States invested 12.5% in 1989.

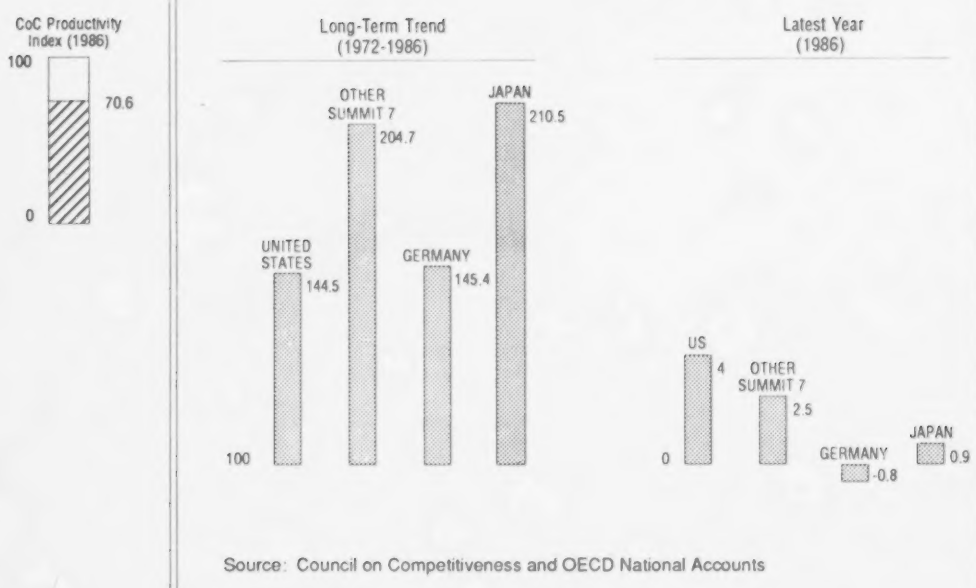
Non-Defense R&D

■ U.S. expenditures on non-defense R&D as a share of GDP, compared with the Other Summit 7 countries, have declined since 1972. The relative decline is even more marked when Japan and Germany are singled out for comparison. In real terms U.S. spending on non-defense R&D has increased slightly over the period covered in our index, but Japan and Germany have increased non-defense R&D spending significantly. The United States allocated 1.6% of GDP to non-defense R&D in 1972, and 1.9% in 1988. Germany, however, increased its non-defense R&D investments from 2.1% to 2.6% of GDP in the period 1972-1988, and Japan jumped from 1.9% to 2.9%.

Education

■ Although U.S. spending for education exceeded the Summit 7 average, U.S. levels as a percent of GDP have declined slightly since 1972. Although Germany and Japan spent less on education in absolute terms than the United States, both of these countries have increased their allocations since 1972. For Germany this meant an upward shift from 3.3% to 3.9% (1986), and for Japan a jump from 3.1% to 3.5% (1987).

The Investment Index is a weighted average of annual expenditures for education, non-defense R&D, and plant and equipment. These investments build the skills, knowledge, and assets that underpin productivity, trade and, ultimately, the standard of living. The Investment Index compares the U.S. performance with the average of the Other Summit 7 nations. It reflects the latest year that we were able to obtain comprehensive data.



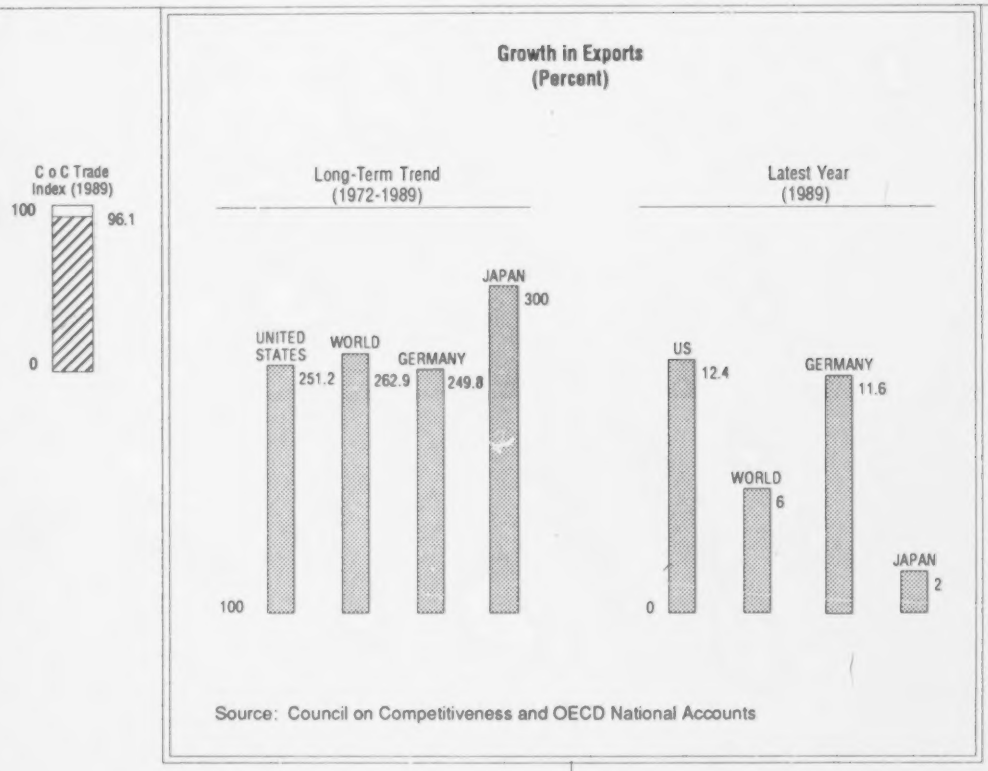
■ Although the Council's Index of Relative U.S. Manufacturing Productivity increased from 69.5 in 1985 to 70.6 in 1986, U.S. labor productivity has declined relative to that of the Other Summit 7 countries since 1972.

■ The United States had the highest absolute productivity of all the Summit 7 countries, despite the comparatively slow pace of improvement. In 1980 constant dollars, the American manufacturing worker produced about $37,300 worth of goods in 1986, compared with the Summit 7 average of $28,600. The Germans came close to the Americans with $35,500, and the Japanese followed with $34,100. Individual country data for 1987 shows the United States producing $38,800, followed by the Japanese ($36,900), and the Germans ($35,500).

■ The real story behind the decline in U.S. manufacturing productivity relative to the Other Summit 7 countries emerges from the long term trends. In 1972, the Other Summit 7 average was $14,000, with the German worker producing $24,200 worth of goods, and the Japanese $16,200. The American worker had produced $25,800 in 1972. Clearly, the biggest productivity gains over time have been in Japan.

■ Japan's manufacturing productivity increased 5.9% annually in the 1972-1987 period. During the same time span, America's annual manufacturing productivity growth rate was 3%, and the German rate of growth was 2.8%. In the period 1972-1986, the Other Summit 7 average annual growth rate was 5.5%.

The Productivity Index measures output per employee in the manufacturing sector. Productivity fundamentally affects the cost of American products relative to those of other nations and underpins real income growth. The Productivity Index compares U.S. performance with the average of the Other Summit 7. It is based on 1980 constant dollars and reflects the latest year that we were able to obtain comprehensive data.



■ Our Trade Index increased from 91.1 in 1988 to 96.1 in 1989, reflecting that the United States increased its share of world manufactured exports. The 1989 U.S. share of world exports of 11% was close to its 12% share in 1972. This is a marked improvement over the period 1983-1987, when the U.S. Trade Index averaged 77.4 points, reflecting a 9% world market share.

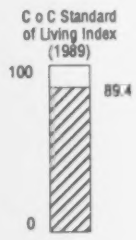
■ The United States was the world's leading exporter in 1989, and its real manufactured exports increased by just over 150% since 1972. Although the United States continued to trail world manufactured exports, U.S. manufactured exports have outperformed the Other Summit 7 average for the first time since 1981. U.S. manufactured export growth, however, most notably lags behind that of Japan. Since 1972, Japan's manufactured exports have risen by 200%.

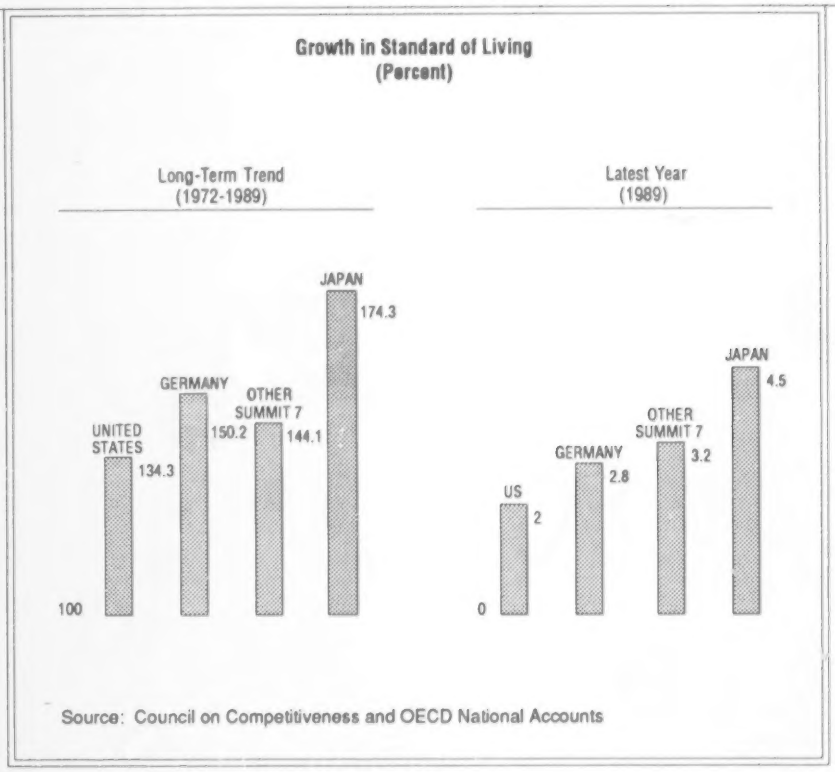
■ The recent improvement in U.S. manufactured export performance is closely linked to the decline in the international value of the dollar since 1985. Trade statistics began to register improvements after 1987.

■ Like the United States, the German share of world manufactured exports also declined since 1972, registering 95.5 in 1989. Germany, however, experienced none of the extreme lows that the United States experienced during the mid-1980s. The lowest German index reading was 90.8 in 1978.

■ Japan's share of world manufactured exports has increased sharply since 1972, with the greatest growth in the mid-1980s. Japan's export index peaked at 138.6 in 1985. Since then, Japanese manufactured exports have not grown as rapidly as the rest of the world and the Japanese Index declined to 114.7 in 1989. The decline reflects the higher yen; increased export competition, mostly from other Asian economies; and more Japanese off-shore production.

The Trade Index measures the U.S. share of world manufactured exports. How well we live is increasingly determined by our ability to compete in world markets. The Council chose exports as the single-best indicator of the U.S. ability to compete worldwide. The Index focuses on the U.S. share of total world manufacturing exports, rather than just U.S. performance compared with the Summit 7 countries, to account for the rapid export growth of developing and newly-industrialized countries.





■ The Standard of Living Index for the United States was 89.4 in 1989, slightly lower than the previous year's 90.5. Because the U.S. standard of living has grown more slowly than that of the Other Summit 7 countries since 1972, the U.S. Standard of Living Index fell below its 1972 base of 100.

■ In absolute dollars the U.S. standard of living remained higher than the Other Summit 7 average, but the gap between the United States and the others is narrowing. In 1972 the United States had a standard of living that was 17.6% higher than that of the Other Summit 7; by 1989 it was only 7.8% higher than that of the others.

■ The Council on Competitiveness measure of the U.S. standard of living in 1989 was one-third higher than in 1972, but that of the Other Summit 7 countries was 50% higher. The German standard of living index rose 44%, and the Japanese index jumped 74%. Thus, although the U.S. standard of living continued to rise, it did not keep pace with the world's most productive economies.

■ The growth rate in standard of living for all the Summit 7 slowed in 1989, compared with the previous year. U.S. growth was only 2% in 1989 compared with 3.1% in 1988. The Other Summit 7 increased 3.2% in 1989, versus the previous year's 3.8% average growth. Japan's 4.5% growth rate is still well above the Summit 7 average, but not as high as the previous year's 5.4%. Germany's standard of living rose 2.8% in 1989, versus 3.6% in 1988.

Standard of Living is defined as real Gross Domestic Product per capita. Calculations are based on 1980 constant dollars.

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Council Executive Committee member Michael Porter (Professor, School of Business Administration, Harvard University) helped develop the initial framework for the Index. Gerald Godshaw (Senior U.S. Director of Long-term Service, The WEFA Group) and Allen Shiau (Senior Vice-President U.S. Macro-Consulting, The WEFA Group) helped perform the economic analysis. Council Executive Vice President Dan Burton was project director. Council Associate Andree Dumermuth produced the Index.

ABOUT THE COUNCIL

Founded in 1986, the Council on Competitiveness is a nonprofit, nonpartisan organization of 150 chief executives from industry, organized labor, and higher education who have one overriding objective: to improve the ability of American companies and workers to compete in world markets, while raising living standards at home. Among the Council's more specific goals are to assist in the development of farsighted government policies and private sector initiatives that help U.S. industry and workers compete; to promote consensus and cooperation on competitiveness-related issues within the private sector; and to increase public awareness of the linkages between America's competitiveness challenge and its economic well-being.

The Council is governed by a 27-member executive committee and draws on the resources of its national affiliates — more than two dozen research organizations, professional societies, and trade associations — to help coordinate private sector activity. The Council is privately supported through contributions from its members, foundations, and other granting institutions.

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